Physica C 193 (1992) 477–480
North-Holland

PHYSICA C

Author Index to Volume 193

Adachi, S., see T. Sakurai **193**, 471
Aihara, K., see T. Nabatame **193**, 390
Alp, E.E., see Y. Geeta **193**, 212
Ansaldo, E.J., see J. Sugiyama **193**, 449
Arabi, H., D.A. Ciomartan, M.E. Clamp, P.W. Mitchell, J. Ross, D.J. Sandiford, O.S. Mills and R.H. Fenn, The structure and magnetic characteristics of a holmium-1,2,3 superconductor with tetragonal symmetry **193**, 90
Artemenko, S.N., I.G. Gorlova and Yu.I. Latyshev, Magnetoresistance of a layered high-T_c superconductor below the Berezinskii–Kosterlitz–Thouless transition **193**, 47
Asano, H., see T. Maeda **193**, 73
Asayama, K., see G. Zheng **193**, 154

Bakhanova, E.S. and V.M. Genkin, Current distribution in the superconducting strip **193**, 463
Barnes, C.L., see M. Lelental **193**, 395
Belevtsov, L.V., see Yu.M. Ivanchenko **193**, 291
Benitez, E.L., see C. Tarrio **193**, 43
Bernik, S., see N. Leyarovska **193**, 441
Bhagat, S.M., see M.X. Huang **193**, 421
Blanton, T.N., see M. Lelental **193**, 395
Bohn, H.G., see Y.T. Wen **193**, 99
Bordet, P., J.J. Capponi, C. Chaillout, D. Chateigner, J. Chenavas, Th. Fournier, J.L. Hodeau, M. Marezio, M. Perroux, G. Thomas and A. Varela, High pressure synthesis and structural study of R_2CuO_4 compounds with R = Y, Tb, Dy, Ho, Er, Tm **193**, 178
Brewer, J.H., see J. Sugiyama **193**, 449
Buckley, R.G., M.P. Staines and H.J. Trodahl, An infrared and Raman study of $YBa_2Cu_4O_8$ and La substituted $YBa_2Cu_4O_8$ **193**, 33
Burlakov, V.M., see A. Zibold **193**, 171
Bykov, A.M., V.N. Korenivski, A.N. Ul'yanov and Ya.I. Yuzhelevskii, Magnetocaloric effect and main parameters of $Bi_2Sr_2Ca_2Cu_3O_y$ textured ceramic superconductor **193**, 25

Cabanel, R., see B. Janossy **193**, 344
Capponi, J.J., see P. Bordet **193**, 178
Catlow, C.R.A., see X. Zhang **193**, 221
Cava, R.J., see Q. Huang **193**, 196
Chaillout, C., see P. Bordet **193**, 178
Chateigner, D., see P. Bordet **193**, 178
Chechersky, V., see N. Kopelev **193**, 137
Chen, D.-X., see A. Sanchez **193**, 437
Chen, J., see W. Gao **193**, 455
Chenavas, J., see P. Bordet **193**, 178
Ciomartan, D.A., see H. Arabi **193**, 90
Clamp, M.E., see H. Arabi **193**, 90
Claus, H., see S. Yang **193**, 243

Dabrowski, B., P. Radaelli, D.G. Hinks, A.W. Mitchell, J.T. Vaughey, D.A. Groenke and K.R. Poeppelmeier, New family of superconducting copper oxides: $GaSr_2Ln_{1-x}Ca_xCu_2O_7$ **193**, 63
Dabrowski, B., see Y. Geeta **193**, 212
Damodaran, A.D., see K.V. Paulose **193**, 273
Das, N.C., see S. Das **193**, 8
Das, S. and N.C. Das, Hole pairing and dependence of transition temperature on carrier concentration in high-T_c superconductors **193**, 8
Downey, J.W., see S. Yang **193**, 243
Dupree, R., see A.P. Howes **193**, 189
Dürrler, M., see A. Zibold **193**, 171

Fabbricatore, P., see B. Zhang **193**, 1
Face, D.W., see R.B. Flippen **193**, 145
Fedorov, V., see N. Naumov **193**, 217
Felder, R.J., see R.B. van Dover **193**, 13
Feng, A., L. Luo, J. Martin and C.J. Maggiore, In-situ growth of $Y_1Ba_2Cu_3O_{7-x}$ thin films directly on sapphire by temperature-controlled chemical vapor deposition **193**, 105
Fenn, R.H., see H. Arabi **193**, 90
Fincher, C.R., see R.B. Flippen **193**, 145
Findikoglu, A.T., see M.X. Huang **193**, 421
Fischer, K.H., Vortex fluctuations, tilt modulus and resistivity of layered high-T_c superconductors **193**, 401
Flavell, W.R., see C.F.J. Flipse **193**, 309
Flippen, R.B., C.R. Fincher, D.W. Face and W.L. Holstein, AC inductance measurements of high-temperature superconductor thin films in DC magnetic fields **193**, 145
Flipse, C.F.J., R. Lindsay, G.N. Raikar, P.L. Wincott, G. Thornton, J.R. Laverty and W.R. Flavell, Resonance photoemission from single crystalline $Bi_2Sr_2CaCu_2O_8$ at the Cu 3p absorption edge **193**, 309
Fournier, Th., see P. Bordet **193**, 178
Fruchter, L., see B. Janossy **193**, 344

Gao, W., J. Chen, C. Ow Yang, D. McNabb and J. Vander Sande, The stability of high-T_c BSCCO/Ag superconducting microcomposites in water, some inorganic solutions and organic solvents **193**, 455
Gaymann, A., see A. Zibold **193**, 171
Geeta, Y., B. Dabrowski, S.M. Mini, M. Ramanathan and E.E. Alp, Oxidation state of copper in RE_2CuO_4 compounds determined via XANES and bond valence methods **193**, 212

Gemme, G., see B. Zhang **193**, 1
Genenko, Yu.A., see Yu.M. Ivanchenko **193**, 291
Genkin, V.M., see E.S. Bakhanova **193**, 463
Geserich, H.P., see A. Zibold **193**, 171
Ginley, D.S., see J.E. Schirber **193**, 126
Glowacki, B.A., see W. Lo **193**, 253
Glucker, H., see J. Sugiyama **193**, 449
Gorlova, I.G., see S.N. Artemenko **193**, 47
Groenke, D.A., see B. Dabrowski **193**, 63
Gu, H., see B. Janossy **193**, 344
Gupta, L.C., see A.K. Rajarajan **193**, 413

Hagen, C.W., see M.A. Scherschel **193**, 264
Hamet, J.F., B. Mercey, M. Hervieu and B. Raveau, *a*-Axis oriented $YBa_2Cu_3O_7$ superconducting thin film grown on MgO substrate **193**, 465
Hase, M., see I. Terasaki **193**, 365
Hermann, B.A., see J. Tate **193**, 207
Hervieu, M., see J.F. Hamet **193**, 465
Hinks, D.G., see B. Dabrowski **193**, 63
Hitterman, R.L., see F. Izumi **193**, 426
Hodeau, J.L., see P. Bordet **193**, 178
Holstein, W.L., see R.B. Flippen **193**, 145
Homma, N., see H. Takahashi **193**, 385
Homnay, Z., see N. Kopelev **193**, 137
Howes, A.P., R. Dupree, D.McK. Paul and S. Male, An ^{17}O NMR study of the Cu–O planes of $Bi_2Sr_2Ca_2Cu_3O_{10}$ **193**, 189
Huang, M.X., S.M. Bhagat, A.T. Findikoglu, T. Venkatesan, M.A. Manheimer and S. Tyagi, Fluxon dynamics and field induced microwave absorption in *c*-axis oriented thin films of $Y_1Ba_2Cu_3O_7$ **193**, 421
Huang, Q., R.J. Cava, A. Santoro, J.J. Krajewski and W.F. Peck, Neutron powder diffraction study of the crystal structure of $YSr_2CoCu_2O_7$ and $Y_{1-x}Ca_xSr_2CoCu_2O_7$ **193**, 196
Hunneyball, P.D., see C.T. Lin **193**, 129

Ichikawa, M., see T. Sakurai **193**, 471
Itoh, Y., S. Noguchi and K. Koyama, Annealing and quenching effects on $Nd_{2-x}Ce_xCuO_{4-\delta}$ **193**, 20
Ivanchenko, Yu.M., L.V. Belevtsov, Yu.A. Genenko and Yu.V. Medvedev, Squeezed vortex in a layered structure of type-II superconductors **193**, 291
Izumi, F., see T. Maeda **193**, 73
Izumi, F., J.D. Jorgensen, Y. Shimakawa, Y. Kubo, T. Manako, S. Pei, T. Matsumoto, R.L. Hitterman and Y. Kanke, Pressure-induced structural changes and charge transfer in $Tl_2Ba_2CuO_{6+z}$ **193**, 426

Janossy, B., H. Gu, R. Cabanel and L. Fruchter, Anisotropy of the critical current density in bulk $Y_1Ba_2Cu_3O_{7-\delta}$ measured by torque magnetometry for various oxygen deficiencies **193**, 344
Jiang, Q., see N. Leyarovska **193**, 441
Job, R., M. Rosenberg and A.V. Niculescu, A magnetic phase diagram describing the pinning behaviour of the ceramic $Tl_2Ba_2Ca_2Cu_3O_y$ high-T_c superconductor **193**, 117
Jorgensen, J.D., see F. Izumi **193**, 426

Kamo, T., see T. Nabatame **193**, 390
Kanke, Y., see F. Izumi **193**, 426
Kê, T.S., see Y.T. Wen **193**, 99
Kimura, T., see I. Terasaki **193**, 365
Kishio, K., see I. Terasaki **193**, 365
Kitaoka, Y., see G. Zheng **193**, 154
Kodama, Y., see G. Zheng **193**, 154
Kojima, H., see M. Shimada **193**, 277
Kojima, H., see I. Terasaki **193**, 365
Kopelev, N., V. Chechersky, J. Tian, Z. Homnay, Y. Wei and A. Nath, Observation of migrating superoxide species in $YBa_2Cu_3(^{57}Co)O_{7-\delta}$ **193**, 137
Korczak, W., M. Perroux and P. Strobel, Superconductivity in $Sr_{0.85}Ln_{0.15}CuO_2$. Extension to samarium **193**, 303
Korenivski, V.N., see A.M. Bykov **193**, 25
Koshy, J., see K.V. Paulose **193**, 273
Kotlyarov, Yu., see N. Naumov **193**, 217
Koyama, K., see Y. Itoh **193**, 20
Koyama, T. and M. Tachiki, Theory for resistive transition in cuprate oxides multilayers **193**, 163
Krajewski, J.J., see Q. Huang **193**, 196
Kubo, Y., see F. Izumi **193**, 426
Kutukova, E.O., see A.N. Terentiev **193**, 110
Kuznetsov, A.A., see A.N. Terentiev **193**, 110

Latyshev, Yu.I., see S.N. Artemenko **193**, 47
Laverty, J.R., see C.F.J. Flipse **193**, 309
Lelental, M., T.N. Blanton, C.L. Barnes and H.J. Romanofsky, Semiquantitative assessment of 2223/2212 phase homogeneity in Bi–(Pb)–Sr–Ca–Cu–O superconducting thin films using XRD techniques **193**, 395
Leyarovska, N., P. Stastny, F.C. Matacotta, Q. Jiang, D. Pal, C.U. Segre, S. Bernik and C. Schmid, The effect of reaction conditions on the $Bi_{1.6}Pb_{0.4}Sr_{2-x}Pr_xCuO_{6+\delta}$ system **193**, 441
Li, B., see Y. Wang **193**, 68
Li, L., see Y. Wang **193**, 68
Li, S.X., see C.T. Lin **193**, 129
Liang, W.Y., see C.T. Lin **193**, 129
Lin, C.T., S.X. Li, A. Mackenzie, W. Zhou, P.D. Hunneyball and W.Y. Liang, The growth of Zn-doped YBCO single crystals **193**, 129
Lindsay, R., see C.F.J. Flipse **193**, 309
Lo, W. and B.A. Glowacki, A study of the formation processes of the 2212 phase in the Bi-based superconductor systems **193**, 253
Luo, L., see A. Feng **193**, 105

Mackenzie, A., see C.T. Lin **193**, 129
Maeda, A., see I. Terasaki **193**, 365
Maeda, T., N. Sakai, F. Izumi, T. Wada, H. Yamauchi, H. Asano and S. Tanaka, Structural properties of $(Pb,Cu)(Sr,Nd)_2(Ho,Ce)_2Cu_2O_{9-\delta}$ **193**, 73
Maggiore, C.J., see A. Feng **193**, 105

Male, S., see A.P. Howes **193**, 189
Manako, T., see F. Izumi **193**, 426
Manheimer, M.A., see M.X. Huang **193**, 421
Marezio, M., see P. Bordet **193**, 178
Markiewicz, R.S., Van Hove excitons and high-T_c superconductivity VIIIA. Valence bond density waves **193**, 323
Martin, J., see A. Feng **193**, 105
Matacotta, F.C., see N. Leyarovska **193**, 441
Matsuda, S.-P., see T. Nabatame **193**, 390
Matsumoto, T., see F. Izumi **193**, 426
McNabb, D., see W. Gao **193**, 455
Medvedev, Yu.V., see Yu.M. Ivanchenko **193**, 291
Mercey, B., see J.F. Hamet **193**, 465
Mills, O.S., see H. Arabi **193**, 90
Mini, S.M., see Y. Geeta **193**, 212
Mitchell, A.W., see B. Dabrowski **193**, 63
Mitchell, P.W., see H. Arabi **193**, 90
Miyamoto, S., see M. Shimada **193**, 353
Mizuno, K., see M. Shimada **193**, 353
Molotkov, S.N., S.S. Nazin, I.S. Smirnova and V.V. Tatarskii, Electronic structure of the (001) surfaces of monocrystalline $YBa_2Cu_3O_7$ **193**, 314
Morishita, T., see H. Takahashi **193**, 385
Morosin, B., see J.E. Schirber **193**, 126
Morris, G.D., see J. Sugiyama **193**, 449
Mozhaev, A.P., see A.N. Terentiev **193**, 110
Müller, P., see A. Zibold **193**, 171
Musenich, R., see B. Zhang **193**, 1

Nabatame, T., J. Sato, Y. Saito, K. Aihara, T. Kamo and S.-P. Matsuda, Correlation between irreversibility magnetic fields and the longest Cu–O layer spacing in high-T_c superconductors **193**, 390
Nath, A., see N. Kopelev **193**, 137
Naumov, N., Yu. Kotlyarov, P. Samoilov and V. Fedorov, The synthesis and properties of the new cuprate $Bi_2Ba_2NdCu_2O_{8+\delta}$ **193**, 217
Nazin, S.S., see S.N. Molotkov **193**, 314
Niculescu, A.V., see R. Job **193**, 117
Niedermayer, C., see J. Sugiyama **193**, 449
Noguchi, S., see Y. Itoh **193**, 20
Nücker, N., see A. Zibold **193**, 171

Okayama, S., see H. Takahashi **193**, 385
Ott, H.R., see M.A. Scherschel **193**, 264
Overmyer, D.L., see J.E. Schirber **193**, 126
Ow Yang, C., see W. Gao **193**, 455

Pal, D., see N. Leyarovska **193**, 441
Parodi, R., see B. Zhang **193**, 1
Paul, D.McK., see A.P. Howes **193**, 189
Paulikas, A.P., see S. Yang **193**, 243
Paulose, K.V., J. Koshy and A.D. Damodaran, YBa_2NbO_6: synthesis, properties and compatibility with $YBa_2Cu_3O_{7-\delta}$ **193**, 273
Peck, W.F., see Q. Huang **193**, 196
Pei, S., see F. Izumi **193**, 426
Perroux, M., see P. Bordet **193**, 178
Perroux, M., see W. Korczak **193**, 303
Poeppelmeier, K.R., see B. Dabrowski **193**, 63

Radaelli, P., see B. Dabrowski **193**, 63
Raikar, G.N., see C.F.J. Flipse **193**, 309
Rajarajan, A.K., L.C. Gupta and R. Vijayaraghavan, Cu(1)-nuclear quadrupole resonance in $REBa_2Cu_3O_6$ (RE=rare earth) **193**, 413
Ramanathan, M., see Y. Geeta **193**, 212
Raveau, B., see J.F. Hamet **193**, 465
Riseman, T.M., see J. Sugiyama **193**, 449
Risso, L., see B. Zhang **193**, 1
Romanofsky, H.J., see M. Lelental **193**, 395
Rosenberg, M., see R. Job **193**, 117
Ross, J., see H. Arabi **193**, 90

Saito, Y., see T. Nabatame **193**, 390
Sakai, N., see T. Maeda **193**, 73
Sakurai, T., N. Sugii, H. Takizawa, M. Ichikawa, Y. Yaegashi, S. Adachi, M. Shimada and H. Yamauchi, $Ba_{0.5}Sr_{0.5}CuO_z$: a new perovskite related structure which forms at high pressure **193**, 471
Samoilov, P., see N. Naumov **193**, 217
Sanchez, A. and D.-X. Chen, Critical-current degradation by surface damage in high-temperature superconductors **193**, 437
Sandiford, D.J., see H. Arabi **193**, 90
Santoro, A., see Q. Huang **193**, 196
Sato, J., see T. Nabatame **193**, 390
Scherschel, M.A., C.W. Hagen, A. Zehnder, S.P. Zhao and H.R. Ott, Radiation-induced hot spots in superconducting Sn strips **193**, 264
Schilling, W., see Y.T. Wen **193**, 99
Schirber, J.E., D.L. Overmyer, E.L. Venturini, D.S. Ginley and B. Morosin, Pressure dependence of the superconducting transition temperature of $Tl_2Ba_2CuO_{6+\delta}$ for $\delta \to 0$ **193**, 126
Schmid, C., see N. Leyarovska **193**, 441
Schnatterly, S.E., see C. Tarrio **193**, 43
Schneemeyer, L.F., see R.B. van Dover **193**, 13
Segre, C.U., see N. Leyarovska **193**, 441
Shimada, M., M. Shimizu, J. Tanaka, I. Tanaka and H. Kojima, Optical studies on $La_{2-x}Sr_xCuO_{4-\delta}$ single crystals **193**, 277
Shimada, M., K. Mizuno, S. Miyamoto, M. Shimizu and J. Tanaka, Optical studies on $Bi_2Sr_2XCu_2O_8$ (X=Ca,Nd) and $Tl_2Ba_2Ca_2Cu_3O_{10}$ single crystals **193**, 353
Shimada, M., see T. Sakurai **193**, 471
Shimakawa, Y., see F. Izumi **193**, 426
Shimizu, M., see M. Shimada **193**, 277
Shimizu, M., see M. Shimada **193**, 353
Shinkoda, I., see J. Sugiyama **193**, 449
Smirnova, I.S., see S.N. Molotkov **193**, 314
Soltner, H., see Y.T. Wen **193**, 99
Staines, M.P., see R.G. Buckley **193**, 33
Stastny, P., see N. Leyarovska **193**, 441

Strobel, P., see W. Korczak **193**, 303
Sugii, N., see T. Sakurai **193**, 471
Sugiyama, J., J.H. Brewer, G.D. Morris, C. Niedermayer, T.M. Riseman, I. Shinkoda, H. Zhou, E.J. Ansaldo, H. Glucker, H. Yamauchi and S. Tanaka, Effect of transition metal doping on magnetism and superconductivity in $Nd_{1.85}Ce_{0.15}Cu_{0.99}M_{0.01}O_4$ (M=Co, Ni and Zn) **193**, 449
Szpunar, B., The influence of deformation twin boundaries and doping on the electronic structure of $CaCuO_2$ **193**, 55

Tachiki, M., see T. Koyama **193**, 163
Takahashi, H., N. Homma, S. Okayama and T. Morishita, Microstructures at the interface between an *a*-axis oriented $YBa_2Cu_3O_{7-x}$ film and a $NdGaO_3$ (110) substrate **193**, 385
Takizawa, H., see T. Sakurai **193**, 471
Tanaka, I., see M. Shimada **193**, 277
Tanaka, I., see I. Terasaki **193**, 365
Tanaka, J., see M. Shimada **193**, 277
Tanaka, J., see M. Shimada **193**, 353
Tanaka, S., see T. Maeda **193**, 73
Tanaka, S., see J. Sugiyama **193**, 449
Tarrio, C., E.L. Benitez and S.E. Schnatterly, Local fields in high-T_c materials **193**, 43
Tatarskii, V.V., see S.N. Molotkov **193**, 314
Tate, J. and B.A. Hermann, The resistive transition of superconducting $Nd_{2-x}Ce_xCuO_{4-\delta}$ films **193**, 207
Terasaki, I., M. Hase, A. Maeda, K. Uchinokura, T. Kimura, K. Kishio, I. Tanaka and H. Kojima, Doping effects on the anisotropic magnetic susceptibility in single-crystal $La_{2-x}Sr_xCuO_4$ **193**, 365
Terentiev, A.N., E.O. Kutukova, A.A. Kuznetsov and A.P. Mozhaev, Spinning rate decay of levitated high-T_c superconductors in rotational magnetic field **193**, 110
Thomas, G., see P. Bordet **193**, 178
Thornton, G., see C.F.J. Flipse **193**, 309
Tian, J., see N. Kopelev **193**, 137
Trodahl, H.J., see R.G. Buckley **193**, 33
Tyagi, S., see M.X. Huang **193**, 421

Uchinokura, K., see I. Terasaki **193**, 365
Ul'yanov, A.N., see A.M. Bykov **193**, 25

Vander Sande, J., see W. Gao **193**, 455
Van Dover, R.B., L.F. Schneemeyer, R.J. Felder and J.V. Waszczak, Anomalous pinning behavior in slightly-oxygen-deficient $Ba_2YCu_3O_{7-\delta}$ **193**, 13
Varela, A., see P. Bordet **193**, 178
Vaughey, J.T., see B. Dabrowski **193**, 63
Veal, B.W., see S. Yang **193**, 243
Venkatesan, T., see M.X. Huang **193**, 421
Venturini, E.L., see J.E. Schirber **193**, 126
Vijayaraghavan, R., see A.K. Rajarajan **193**, 413

Wada, T., see T. Maeda **193**, 73
Wang, Y., L. Li and B. Li, High field critical current density and flux "melting" in *C*-oriented high-T_c phase BiPbCaSrCuO thin film **193**, 68
Waszczak, J.V., see R.B. van Dover **193**, 13
Wei, Y., see N. Kopelev **193**, 137
Wen, Y.T., T.S. Kê, H.G. Bohn, H. Soltner and W. Schilling, Amplitude effect of internal friction associated with magnetic flux pinning in $YBa_2Cu_3O_{7-x}$ superconductor **193**, 99
Wheeler, R., see S. Yang **193**, 243
Wincott, P.L., see C.F.J. Flipse **193**, 309

Yaegashi, Y., see T. Sakurai **193**, 471
Yamada, Y., see G. Zheng **193**, 154
Yamauchi, H., see T. Maeda **193**, 73
Yamauchi, H., see J. Sugiyama **193**, 449
Yamauchi, H., see T. Sakurai **193**, 471
Yang, S., H. Claus, B.W. Veal, R. Wheeler, A.P. Paulikas and J.W. Downey, New observation of a phase boundary in oxygen deficient $YBa_2Cu_3O_{7-\delta}$ single crystals **193**, 243
Yuzhelevskii, Ya.I., see A.M. Bykov **193**, 25

Zandbergen, H.W., $ABa_2Cu_4O_8$ and $ABa_2Cu_5O_{10}$ formed by intercalation in $ABa_2Cu_3O_7$ at 20°C in air **193**, 371
Zehnder, A., see M.A. Scherschel **193**, 264
Zhang, B., P. Fabbricatore, G. Gemme, R. Musenich, R. Parodi and L. Risso, Preparation and characterization of $YBa_2Cu_3O_{7-x}$ superconducting films deposited by electrophoresis **193**, 1
Zhang, X. and C.R.A. Catlow, Computer simulation study of pressure-induced structural changes in $YBa_2Cu_4O_8$ **193**, 221
Zhao, S.P., see M.A. Scherschel **193**, 264
Zheng, G., Y. Kitaoka, K. Asayama, Y. Kodama and Y. Yamada, ^{17}O NMR study of local hole density and spin dynamics in $YBa_2Cu_4O_8$ **193**, 154
Zhou, H., see J. Sugiyama **193**, 449
Zhou, W., see C.T. Lin **193**, 129
Zibold, A., M. Dürrler, A. Gaymann, H.P. Geserich, N. Nücker, V.M. Burlakov and P. Müller, Optical anisotropy and electron–phonon coupling in $Bi_2Sr_2CaCu_2O_8$ single crystals **193**, 171

Physica C 193 (1992) 481–482
North-Holland

PHYSICA C

Analytic Subject Index to Volume 193

AC susceptibility 145, 253, 437
Anisotropic superconductor 25, 171, 344, 365, 390, 401
Applications of high-T_c superconductors 110, 264, 455

Band structure
–of $La_{2-x}Sr_xCuO_{4-\delta}$ 277

Carrier concentration 8, 154, 365
Charge-density waves 323
Charge transfer 426
Critical current density 1, 68, 117, 344, 455, 463
–in $YBa_2Cu_3O_{7-\delta}$ 437
Critical state model 437
Cu deficiency 90
Current distribution 463
Cu-valence 212

Defect structures 73, 243, 371, 385
Dielectric constant 273

Electrical resistivity 13, 20, 47, 390, 401, 441
–of $Nd_{2-x}Ce_xCuO_{4-\delta}$ 207
Electron-doped superconductor 20, 178, 449
Electronic structure 81, 314
–of $Bi_2Sr_2CaCu_2O_8$ 309
–of $CaCuO_2$ 55
Electron–phonon coupling 43
Electron-phonon coupling 171
Electron–phonon coupling 323, 353
Electrophoresis 1
Energy gap 8
Excitonic mechanism 323

Far-infrared spectra 33
Fluctuation effects 47, 163, 401
–in $Ba_2YCu_3O_7$ 13
Fluctuations 323
Flux creep 68
–in $Nd_{2-x}Ce_xCuO_{4-\delta}$ 207
Flux dynamics 99, 110, 117, 421
Flux pinning 99, 110, 117, 344
–in $Ba_2YCu_3O_7$ 13

Ginzburg–Landau theory 163
Grain alignment (texturing) 465

High pressure effect 126, 426
HREM 221, 371, 471
Hubbard Hamiltonian 8

Infrared spectroscopy
–of $Bi_2Sr_2XCu_2O_8$ (X=Ca,Nd) 353
–of $La_{2-x}Sr_xCuO_{4-\delta}$ 277
–of $Tl_2Ba_2Ca_2Cu_3O_{10}$ 353
Irradiation effect 264
Irreversibility line 117, 390

Kosterlitz–Thouless model 47, 291, 401

Lattice dynamics 33
Lattice parameters 73
–of $Sr_{0.85}Ln_{0.15}CuO_2$ 303
Layered superconductor 291
Local field effects 43
Lower critical field H_{c1} 20, 25

Magnetic susceptibility 20, 63, 126, 303
–of $La_{2-x}Sr_xCuO_4$ 365
Magnetocaloric effect
–in $Bi_2Sr_2Ca_2Cu_3O_y$ 25
Magnetoresistance 25
Meissner effect 20
Microwave absorption 421
Mixed state 47
Mössbauer spectroscopy
–of $YBa_2Cu_3(^{57}Co)O_{7-\delta}$ 137
Multilayers 47, 163
Muon spin rotation 449

Neutron diffraction 90, 196, 426
Neutron scattering (inelastic)
–of $Bi_2Sr_2Ca_2Cu_3O_{10}$ 189
NMR
–in $YBa_2(Cu_{1-x}M_x)_3O_7$ 81
–of $Bi_2Sr_2Ca_2Cu_3O_{10}$ 189
–of $YBa_2Cu_4O_8$ 154
Non-ohmic behaviour 68
Normal-state properties 365
NQR
–in $REBa_2Cu_3O_6$ 413

Optical anisotropy 171
Optical spectroscopy 171

Oxygen diffusion 137
Oxygen stoichiometry 13, 90
–in $Tl_2Ba_2CuO_{6+\delta}$ 126
–in $YBa_2Cu_3O_{7-\delta}$ 243

Phonon spectrum 353
–of $La_{2-x}Sr_xCuO_{4-\delta}$ 277
Photoemission spectroscopy
–on $Bi_2Sr_2CaCu_2O_8$ 309
Proximity effect 163

Raman scattering 33

Single-crystal growth
–of $YBa_2Cu_{3-x}Zn_xO_{7-y}$ 129
–of $YBaZn_{3-x}Cu_xO_y$ 129
Spin fluctuations 154
Spin–lattice relaxation time T_1 189, 413
Stability
–of BSCCO/Ag 455
Structural phase transition 221, 395
Structure
–of $ABa_2Cu_3O_7$ 371
–of $Ba_{0.5}Sr_{0.5}CuO_z$ 471
–of $Bi_{1.6}Pb_{0.4}Sr_{2-x}Pr_xCuO_{6+\delta}$ 441
–of $Bi_2Ba_2NdCu_2O_{8+\delta}$ 217
–of Bi–(Pb)–Sr–Ca–Cu–O 395
–of $GaSr_2Ln_{1-x}Ca_xCu_2O_7$ 63
–of $HoBa_2Cu_3O_{7-\delta}$ 90
–of
(Pb,Cu)(Sr,Nd)$_2$(Ho,Ce)$_2$Cu$_2$O$_{9-\delta}$ 73
–of R_2CuO_4 178
–of RE_2CuO_4 212
–of $Tl_2Ba_2CuO_{6+z}$ 426
–of $Y_{1-x}Ca_xSr_2CoCu_2O_7$ 196
–of $YBa_2Cu_4O_8$ 221
–of $YSr_2CoCu_2O_7$ 196
Structures phase transition 323
Substitution effects
–in $Nd_{1.85}Ce_{0.15}Cu_{0.99}M_{0.01}O_4$ (M=Co, Ni and Zn) 449
–in $YBa_2(Cu_{1-x}M_x)_3O_7$ 81
–in $YBa_2Cu_4O_8$ 33
Surface impedance 1
Synthesis
–of $Ba_{0.5}Sr_{0.5}CuO_z$ 471
–of $Bi_{1.6}Pb_{0.4}Sr_{2-x}Pr_xCuO_{6+\delta}$ 441
–of $Bi_2Ba_2NdCu_2O_{8+\delta}$ 217
–of Bi–Sr–Ca–Cu–O 253

–of $GaSr_2Ln_{1-x}Ca_xCu_2O_7$ 63
–of
$(Pb,Cu)(Sr,Nd)_2(Ho,Ce)_2Cu_2O_{9-\delta}$ 73
–of R_2CuO_4 178
–of $Sr_{0.85}Ln_{0.15}CuO_2$ 303
–of $Y_1Ba_2Cu_3O_{7-x}$ 105
–of $YBa_2Cu_3(^{57}Co)O_{7-\delta}$ 137
–of $YBa_2Cu_3O_7$ 465
–of $YBa_2Cu_3O_{7-\delta}$ 243
–of $YBa_2Cu_3O_{7-x}$ 385
–of YBa_2NbO_6 273
Thermal analysis 253
Thermal conductivity 264
Thin films 1, 68, 145, 264, 273, 385, 395, 421, 465
–of $Nd_{2-x}Ce_xCuO_{4-\delta}$ 207
–of $Y_1Ba_2Cu_3O_{7-x}$ 105
Torque magnetometry 344
Tunneling 314
Twin boundaries 55

Upper critical field H_{c2} 25

Vortex 291

XANES 212
XRD 253

Physica C 193 (1992) 483
North-Holland

PHYSICA C

Materials Index to Volume 193

$ABa_2Cu_3O_7$
–structure 371

$Ba_{0.5}Sr_{0.5}CuO_z$
–structure 471
–synthesis 471
$Ba_2YCu_3O_7$
–fluctuation effects 13
–flux pinning 13
$Bi_{1.6}Pb_{0.4}Sr_{2-x}Pr_xCuO_{6+\delta}$
–structure 441
–synthesis 441
$Bi_2Ba_2NdCu_2O_{8+\delta}$
–structure 217
–synthesis 217
$Bi_2Sr_2Ca_2Cu_3O_{10}$
–neutron scattering (inelastic) 189
–NMR 189
$Bi_2Sr_2Ca_2Cu_3O_y$
–magnetocaloric effect 25
$Bi_2Sr_2CaCu_2O_8$
–electronic structure 309
–photoemission spectroscopy 309
$Bi_2Sr_2XCu_2O_8$
–infrared spectroscopy 353
Bi–(Pb)–Sr–Ca–Cu–O
–structure 395
Bi–Sr–Ca–Cu–O
–synthesis 253

$CaCuO_2$
–electronic structure 55

$GaSr_2Ln_{1-x}Ca_xCu_2O_7$
–structure 63
–synthesis 63

$HoBa_2Cu_3O_{7-\delta}$
–structure 90

$La_{2-x}Sr_xCuO_4$
–magnetic susceptibility 365
$La_{2-x}Sr_xCuO_{4-\delta}$
–band structure 277
–infrared spectroscopy 277
–phonon spectrum 277

$Nd_{1.85}Ce_{0.15}Cu_{0.99}M_{0.01}O_4$
–substitution effects 449
$Nd_{2-x}Ce_xCuO_{4-\delta}$
–electrical resistivity 207
–flux creep 207
–thin films 207

$(Pb,Cu)(Sr,Nd)_2(Ho,Ce)_2Cu_2O_{9-\delta}$
–structure 73
–synthesis 73

R_2CuO_4
–structure 178
–synthesis 178
RE_2CuO_4
–structure 212
$REBa_2Cu_3O_6$
–NQR 413

$Sr_{0.85}Ln_{0.15}CuO_2$
–lattice parameters 303
–synthesis 303

$Tl_2Ba_2Ca_2Cu_3O_{10}$
–infrared spectroscopy 353
$Tl_2Ba_2CuO_{6+\delta}$
–oxygen stoichiometry 126
$Tl_2Ba_2CuO_{6+z}$
–structure 426

$Y_1Ba_2Cu_3O_{7-x}$
–synthesis 105
–thin films 105
$Y_{1-x}Ca_xSr_2CoCu_2O_7$
–structure 196
$YBa_2(Cu_{1-x}M_x)_3O_7$
–NMR 81
–substitution effects 81
$YBa_2Cu_3(^{57}Co)O_{7-\delta}$
–Mössbauer spectroscopy 137
–synthesis 137
$YBa_2Cu_3O_7$
–synthesis 465
$YBa_2Cu_3O_{7-\delta}$
–critical current density 437
–oxygen stoichiometry 243
–synthesis 243
$YBa_2Cu_3O_{7-x}$
–synthesis 385
$YBa_2Cu_{3-x}Zn_xO_{7-y}$
–single-crystal growth 129
$YBa_2Cu_4O_8$
–NMR 154
–structure 221
–substitution effects 33
YBa_2NbO_6
–synthesis 273
$YBaZn_{3-x}Cu_xO_y$
–single-crystal growth 129
$YSr_2CoCu_2O_7$
–structure 196